Title: Perfect score: Sequence:

US-09-854-731A-3 2374 1 gcacgagggcgtatt

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nucleic search, using sw model

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Scoring table:

IDENTITY\_NUC
Gapop 10.0 , Gapext 1.0

Minimum DB Maximum DB

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length: 0 length: 2000000000

Post-processing:

Database

Issued\_Patents\_NA:\*
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2: /cgn2\_6/ptodata/1,
3: /cgn2\_6/ptodata/1,
4: /cgn2\_6/ptodata/1,
5: /cgn2\_6/ptodata/1,
6: /cgn2\_6/ptodata/1,

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Total number of hits satisfying chosen parameters:
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Maximum Match 100%
Listing first 45 summaries
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Copyright (c) 1993 - 2003
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/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
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/cgn2_6/ptodata/1/ina/bcTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
US-09-347-801-3
US-09-347-801-7
US-08-464-164-1
US-08-338-057-1
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US-08-459-448A-20
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US-08-655-352-1
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GENERAL INFORMATION:
APPLICANT: Allen, Steve
APPLICANT: Lee, Jian Ming
ITILE OF INVENTION: Plant Protein Kinases
FILE REFERENCE: BB-1171
CURRENT APPLICATION NUMBER: US/09/347,801
CURRENT FILLING DATE: 1999-07-02
EARLIER APPLICATION NUMBER: 60/092,438
EARLIER APPLICATION NUMBER: 50/092,438
EARLIER FILLING DATE: July 10, 1998
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Microsoft Office 97
SEQ ID NO 3
LENGTH: 2374
TYPE: DNA
ORGANISM: Oryza sativa
US-09-347-801-3
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100.0%; Pred. No. 0;
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Sequence 15, Appl
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RESULT 2
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; Sequence 7, Application
; Patent No. 6262345
; GENERAL INFORMATION: APPLICANT: Allen, Steve APPLICANT: Lee, Jiah Ming TITLE OF INVENTION: Plant P. FILE REFERENCE: BB-1171 CURRENT APPLICATION NUMBER; US/0934780 Protein Kinases US/09/347,801

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EARLIER APPLICATION NUMBER: 60/092,438
EARLIER FILING DATE: July 10, 1998
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Microsoft Office 97
SEQ ID NO 7
                                                                                                                                                                                                                                    Sequence 1, Application US/08464164 Patent No. 5614195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity Matches 332; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                              GENERAL INFORMATION:

APPLICANT: Tomley, Fiona M.

APPLICANT: Dunn, Paul P. J.

APPLICANT: Bumstead, Janene M.

APPLICANT: Bumstead, Janene M.

APPLICANT: Vermeulen, Arno N.

TITLE OF INVENTION: Coccidiosis poultry vaccine

NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 498
TYPE: DNA
ORGANISM: Triticum aestivum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: unsure LOCATION: (498)
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                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Akzo No. 5614195el Patent Department
                                                                                                                                                                                                                                                                                                                                              480
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              CITY: Rockville STATE: Maryland COUNTRY: U.S.A.
                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 GAACTACTTGATAAGATATTGGCGAGAGGTGGAAAGTATTCTGAAGAGGATGCAAAGGTT 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATTTGAAGCCAGAGAATTTCCTTTTCACAACCAGGGATGAAAATGCTCCCATGAAGTTG 115:
                                                                                                                                                                                                                                                                                                                                                                                                                                ACCGTGGCCTACAGTATCAGCTGAAGCTAAGGATTTTGTGAAGAGAGTTTTCTGAACAAAGA 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGAACAGAATCAGGAATATTCCGATCTGTGTGAGAGCTGATCCCAACTTTGATGATTC
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                                                                                                                                                                                                                                                                                                                                              TTACCCAAGAGGA 492
                                                                                                                                                                                                                                                                                                                                                                              TTACCGCAAAAGA 1460
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                                                                                                                                                                                                                                                                                                                                                                                                                CCCAAGGCCTACCTCCTGCGGAACCAAAG - - ACTTGTTAAAAGGGTGCTTAATAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCCACAGAATCCAGGAATATTCCCAGCTTCCCTTAAAGCAAAACCAATTTTGATGAAGC
20850
                                                                  1300 Piccard Drive, Suite 206
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Pred. No. 2.3e-34;
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INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 1400 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Gormley, Mary E.
REGISTRATION NUMBER: 34,409
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION: NAME: Gormley, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FRAGMENT TYPE: C-terminal ORIGINAL SOURCE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LIBRARY: sporozoite cDNA cloned CLONE: Em70-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: June 2, 1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85
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DEVELOPMENTAL STAGE:
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TOPOLOGY: li
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
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                                                                                                                                         ACAACCAGGGATGAAAATGCTCCCATGAAGTTGATTTTGGTCTCTCTGATTTCATT 1178
                                                                                                                                                                                                                                                                                                       GGCGGGAGATACACAGAGGAAGATGCCAAAGCGATTGTTGTACAGATTTTTGAGCGTAGTA 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGTTATCAGGGCACAATAATCTCGTCAAATTCTATGATGCATGTGAGGATGGCCTCAAT 938
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TTACACAGATCATATAGTATGGAAGCAGACATTTGGAGTATAGGTGTCATAACGTACATT 1296
                                     GAGCCCCAAAAAAAAATGAAGGATAAAATCGGGACCGCGTACTACATTGCCCCCTGAGGTG
                                                                          AGACCAGATGAAAGGCTTAATGATATTGTTGGAAGTGCATATTATGTTGCCCCAGAGGTT 1238
                                                                                                                                                                                               AATTATATGCATCGTAATAAAATAGTTCATAGAGATTTAAAAGCCAGAGAATTTATTATTA 378
                                                                                                                                                                                                                      GCCTTCTGTCATCTTCAGGGGGTAGTGCATCGTGATTTGAAGCCAGAGAATTTCCTTTTC 1118
                                                                                                                                                                                                                                                                                                                                                             TTTTATCTTGATACAGAAGTATATACAGGAGGAGAATTATTTGATGAAATTATTAATCGA 261
                                                                                                                                                                                                                                                                                                                                                                                                   GTCTACATTGTCATGGAATTATGTGAGGGAGGAGAATTGCTAGACAGAATATTAGCCAGA 998
                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGAAATTAGATCATCCTAATATCATGAAATTATATGAATTCTTTGAGGATAAAGGATAC
                                                                                                                    GAGAATAAAAAAAAAAGATGCAAATATACGAATTATTGATTTTGGGTTATCTACACATTTT
                                                                                                                                                                                                                                                                              AAA----AGATTCAGCGAGGCGGATGCAGCTCGTATAGTACGTCAGGTTCTATCGGGTATA 318
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52.4%;
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US-08-338-057-1
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                                                                               TOPOLOG:
TOPOLOG:
MOLECULE TYPE: CL...
HYPOTHETICAL: NO
""PT-SENSE: NO
""PENSE: C-terminal
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                                                                                                                                                                                                                                                                              APPLICATION NUMBER: EP 93.309
FILING DATE: 12-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: GOITHLEY, MAIY E.
REGISTRATION NUMBER: 34,409
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                               TELEPHONE: (301) 258-520
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 1400 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IDM COMPUTER: GOMPOTER: POPERATING SYSTEM: POPERATING SYSTEM: POPERATING SYSTEM: PATENT APPLICATION DATA;
CURRENT APPLICATION DATA;
                   STRAIN: Houghton
DEVELOPMENTAL STAGE: sporozoite
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Bumstead, Janene M.
APPLICANT: Vermeulen, Arno N.
TITLE OF INVENTION: Coccidiosis poultry vaccine
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1359 TTGAGAGCTGATCCCAACTTTGATGATTCACCGTGGCCTACAGTATCAGCTGAAGCTAAG 1418
CLONE:
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                LIBRARY:
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                                                                       ORGANISM:
                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                   TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Rockville
                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE:
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ZIP: 20850
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Em70-1
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           sporozoite cDNA cloned
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                                                                     Eimeria maxima
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RESULT 5 US-08-668-416-1

Sequence 1, Application US/08668416 Patent No. 5843722 GENERAL INFORMATION:

APPLICANT: Donney, Fiona M.
APPLICANT: Dunn, Paul P. J.
APPLICANT: Bumstead, Janene M.
APPLICANT: Wermeulen, Arno N.
TITLE OF INVENTION: Coccidiosis poultry vaccine
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:

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; LOCATION:
US-08-338-057-1
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Best Local
                 1479 CTGACTCATCCTTGGTT 1495
                                                                                     1419 GATTTTGTGAAGAGATTTCTGAACAAAGATTACCGCAAAAGAATGACCGCTGTTCAAGCA 1478
                                                                                                                                          1359 TTGAGAGCTGATCCCAACTTTGATGATTCACCGTGGCCTACAGTATCAGCTGAAGCTAAG 1418
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                                                     GATTTAATTAGGAAGATGTTAGCATATGTACCCTCAATGCGTATATCAGCAAAAGATGCA 738
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Pred. No. 3.3e-25;
0; Mismatches 345;
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REGISTRATION NUMBER: 34,409
TELEPHONE: (301) 258-5200
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1400 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                       Matches 386;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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APPLICATION NUMBER: US/08
FILING DATE: June 2, 1999:
ATTORNEY/AGENT INFORMATION:
NAME: GOTMLEY, Mary E.
SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
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COUNTRY:
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LOCATION: 1..1368
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DEVELOPMENTAL STAGE: sporozoite
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CITY: Rockville
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                                                                                                                                                                                                                     GCGTTATCAGGGCACAATAATCTCGTCAAATTCTATGATGCATGTGAGGATGGCCTCAAT 938
                                                                                                                                                                                                                                                                                         GCTAAGATGACAACGGCAATATCCATTGAGGATGTTCGTAGAGAAGTAAAAATTTTGAGA 878
                                                                  AAA---AGATTCAGCGAGGCGGATGCAGCTCGTATAGTACGTCAGGTTCTATCGGGTATA 318
                                                                                       GGCGGGAGATACACAGAGGAAGATGCCAAAGCGATTGTTGTACAGATTTTGAGCGTAGTA 1058
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                                                                                                                                                                                                                                                                                                                                                                                                                       Score 153; DB 2;
Pred. No. 3.3e-25;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1400;
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US-07-951-715A-20
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APPLICANT:
           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/772,027
FILING DATE: 04-OCT-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: CIBA-GEIGY Corporation
                                                                                                                                                                                                                                                                                                                                                      APPLICANT: SUTTIE, Jänet L.
TITLE OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED
TITLE OF INVENTION: INSECTICIDAL ACTIVITY IN MAIZE
NUMBER OF SEQUENCES: 94
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ATTORNEY/AGENT INFORMATION:
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CITY: H
STATE:
                                                                                     APPLICATION NUMBER: US/07/951,715A FILING DATE: 25-SEP-1992
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COMBERT: 7 Skyline Drive
                                                                      CLASSIFICATION:
                                                                                                                                                                                                                               ZIP:
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                                                                                                                                                                                                                                                  USA
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Dunder, Erik M.
Pace, Gary M.
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Launis, Karen L.
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                                                                                                                                         Version
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Best Local Similarity
Matches 335; Conserv
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INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
                                                                                                1483 CTCATCCTTGGTTGCGAGATGA 1504
                                                                                                                                                                                        1423
                                                                                                                                                                                                                                                                1363
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                                                                                                                                                                                                                                                                                                                                                                                    1243 ACAGATCATATAGTATGGAAGCAGACATTTGGAGTATAAGGTGTCATAACGTACATTCTGC 1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1183 CAGATGAAAGGCTTAAATGATATTGTTGGAAGTGCATATTATGTTGCCCCCAGAGGTTTTAC 1242
                                                                                                                                                                                                                            496
                                                                                                                                                                                                                                                                                                  436
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1063 TCTGTCATCTTCAGGGGGTAGTGCATCGTGATTTGAAGCCAGAGAATTTCCTTTTCACAA 1122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: $1n~'
TOPOLOGY
                                                                               616
                                                                                                                                                                                                                                                                                                                                                             376 AGAGGAAGTACGGCCCGGAGGCCGACATCTGGAGCGTCGGCGTCATGCTCTACATCTTCC 435
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (919)541-8615
                                                                                                                                                                                                                                                                                                                                                                                                                                   316 AGGGCGAGCTGCTCAGGGACATCGTCGGCAGCGCCCTACTACATCGCGCCCCGAGGTGCTCA 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                196 CCTGCCACTCCATGGGGGTGATGCACCGGGACATCAAGCCCGAGAACTTCCTGCTGCTCA 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139
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HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 3..1226
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 883 TATCAGGGCACAATAATCTCGTCAAATTCTATGATGCATGTGAGGATGGCCTCAATGTCT 942
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER:
                                                                                                                                                                            TTGTGAAGAGATTTCTGAACAAAGATTACCGCAAAAGAATGACCGCTGTTCAAGCACTGA 1482
                                                                                                                                                                                                                  GAGGGCAGCTTGACCTCTCCAGCGAGCCATGGCCACACATCTCGCCGGGAGCCAAGGATC 555
                                                                                                                                                                                                                                                   GAGCTGATCCCAACTTTGATGATTCACCGTGGCCTACAGTATCAGCTGAAGCTAAGGATT 1422
                                                                            ATCACCCATGGATCAAAGAAGA 637
                                                                                                                                            TCGTCAAGAAGATGCTCAACATCAACCCCCAAGGAGCGGCTCACGGCGTTCCAGGTCCTCA
                                                                                                                                                                                                                                                                                       TOSCOGGCGTGCCTTCTGGGCAGAGAACGAGAACGGCATCTTCACCGCCATCCTGC 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAAGGACGAGGACGCCCCCCCAAGGCCACCGACTTCGGCCTCTCCGTCTTCTTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AG---TACACGGAGCGCGCGCGCGCGGAGCTGCTGCGCGCCATCGTGCAGATCGTGCACA 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAGATACACAGAGGAAGATGCCAAAGCGATTGTTGTACAGATTTTGAGCGTAGTAGCCT 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCCGGCCAGCCCAACGTGGTGGGCCCTCCGCGGCGCGCGTACGAGGACAAGCAGAGCGTGC 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCTCGTCATGGAGCTGTGCGCGGGGGGGGGGGGCTCTTCGACCGCATCATCGCCCGGGGGCC 138
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53.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "cDNA sequence for maize
pollen-specific calcium dependent protein kinase gene
disclosed in Figure 30."
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US-08-459-448A-20
                                    Matches
                                                Query Match
Best Local 9
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                                                                                                                                                                                                                                                                                                        TELEFAX: (919)541-868 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                  TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (919)541-8582
                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/772,027
FILING DATE: 04-OCT-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, V.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,448A
FILING DATE: 02-JUN-1995
CLASSIFICATION: 800
                                                                                                            LOCATION: 3..1226
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 5859336artis Corporation
STREET: Patent & Trademark Dept., 520 W
STREET: Rd., POB 2005
CITY: Tarrytown
STATE: New York
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APPLICANT:
883 TATCAGGGCACAATAATCTCGTCAAATTCTATGATGCATGTGAGGATGGCCTCAATGTCT 942
                                                                                                                                                                                                    HYPOTHETICAL:
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APPLICANT:
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                                                                                                                                                                    NAME/KEY: CDS
                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 40403
REFERENCE/DOCKET NUMBER: C
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                                                                                                                                                                                                                                                                            LENGTH:
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                                    al Similarity
335; Conserv
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5859336
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                                    Conservative
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Suttle, Janet L.
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Bowman, Cindy G.
Dawson, John L.
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Merlin, Ellis J.
Launis, Karen L.
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                                                                                                                                                                                                                                                                                                                                                                                                  Gary M.
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                                                                                                                                                                                                                                              single
                                                53.98;
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                                                                                                  /note= "cDNA sequence for maize pollen-specific calcium dependent protein kinase disclosed in Figure 30."
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                                               Score 151.6; DB 2
Pred. No. 6.7e-25;
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20, Application US/08459595A Patent No. 6018104 GENERAL INFORMATION:
                                                                                                                                                                    APPLICANT:
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APPLICANT:
APPLICANT:
APPLICANT:
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               CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6018104artis Corporation
STREET: Patent & Trademark Dept., 520 White Plains
STREET: Rd., POB 2005
                                                                                          APPLICANT: Suttie, Janet L.
TITLE OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED
TITLE OF INVENTION: INSECTICIDAL ACTIVITY IN MAIZE
NUMBER OF SEQUENCES: 94
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 STREET:
CITY: T
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCATCCTTGGTTGCGAGATGA 1504
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Tarrytown
                                                                                                                                                                                                                                                           Crossland, Lyle D. Wright, Martha S. Merlin, Ellis J. Launis, Karen L.
                                                                                                                                                                  Dawson, John L.
Dunder, Erik M.
Pace, Gary M.
                                                                                                                                                                                                                                                                                                                                  Kramer, Vance C.
Warren, Gregory W.
Evola, Stephen V.
                                                                                                                                                                                                                        Rothstein, Steven J
Bowman, Cindy G.
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Michael G.
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ATTORNEY/AGENT INFORMATION:
NAME: PACE, GAIY M.
REGISTRATION NUMBER: 40403
REFERENCE/DOCKET NUMBER: CGC
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919)541-8582
TELEPAX: (919)541-8689
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/951,715
APPLICATION NUMBER: US 07/772,027
PRIOR APPLICATION NUMBER: US 07/772,027
                                                                                                                                                                                                     1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: CDS
LOCATION: 3..1226
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
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                     376
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COUNTRY:
ZIP: 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                    ACAGATCATATAGTATGGAAGCAGACATTTGGAGTATAGGTGTCATAACGTACATTCTGC 1302
                                                                                                          CAGATGAAAGGCTTAATGATATTGTTGGAAGTGCATATTATGTTGCCCCCAGAGGTTTTAC 1242
                                                                                                                                                                                                   CCTGCCACTCCATGGGGGTGATGCACCGGGACATCAAGCCCGAGAACTTCCTGCTGCTCA 255
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                 AGAGGAAGTACGGCCCGGAGGCCGACATCTGGAGCGTCGGCGTCATGCTCTACATCTTCC
                                                                                                                                                                GCAAGGACGAGGACGCGCCCCTCAAGGCCACCGACTTCGGCCTCTCCGTCTTCTTCAAGG
                                                                                                                                                                                                                                                                                                                 AG---TACACGGAGCGCGCGCGCGGAGCTGCTGCGCGCGCCATCGTGCAGATCGTGCACA 195
                                                                                                                                                                                                                                                                                                                                                                                       ACCTCGTCATGGAGCTGTGCGCGGGGGGGGGGGCTCTTCGACCGCATCATCGCCCGGGGCC 138
                                                                                        AGGGCGAGCTGCTCAGGGACATCGTCGGCAGCGCCTACTACATCGCGCCCCGAGGTGCTCA
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335; Conserv
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10591-9005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.4%; Score 151.6; DB 3; 53.9%; Pred. No. 6.7e-25; 7ative 0; Mismatches · 284;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "cDNA sequence for maize
pollen-specific calcium dependent protein kinase
disclosed in Figure 30."
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                      APPLICATION NUMBER: US 07/772,027
FILLING DATE: 04-OCT-1991
ATTORNEY/AGENT INFORMATION:
NAME: Meligs, J. Timochy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: CGC1577/CI
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919)541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: KOZIEL,
APPLICANT: Desai,
APPLICANT: Lewis,
APPLICANT: Kramer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20, Patent No. 6
 INFORMATION FOR SEQ
                                                                                                                                                         PRIOR APPLICATION NUMBER: US 08/459,595
FILING DATE: 02-JUN-1995
APPLICATION NUMBER: US 07/951,715
FILING DATE: 25-SEP-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                ZIP: 27709
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: PACE, GATY M.
APPLICANT: Suttie, Janet L.
TITLE OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED
TITLE OF INVENTION: INSECTICIDAL ACTIVITY IN MAIZE
NUMBER OF SEQUENCES: 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: S
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                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: U
ZIP: 27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: NC
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6075185
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              (919)541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dawson, John L.
Dunder, Erik M.
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Evola, Stephen V.
Crossland, Lyle D.
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Launis, Karen L.
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ID NO:
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US-08-459-444-20

Sequence 0, Application US/08459444A Patent No. 6121014
GENERAL INFORMATION:

APPLICANT:

Desai, Nalini Koziel,

Z

Michael

Lewis, Kelly S. Kramer, Vance C.

RESULT 10

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: NAME/KEY: CDS
: LOCATION: 3.1226
: OTHER INFORMATION:
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Best Local (
                   1483 CTCATCCTTGGTTGCGAGATGA 1504
                                                                                                                                                                                                                                                                                                        1243
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616 ATCACCCATGGATCAAAGAAGA 637
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HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 1349 base pairs
TYPE: nucleic acid
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TOPOLOGY: li
                                                                                         TTGTGAAGAGATTTCTGAACAAAGATTACCGCAAAAGAATGACCGCTGTTCAAGCACTGA 1482
                                                         TCGTCAAGAAGATGCTCAACATCAACCCCCAAGGAGCGGCGTCACGGCGTTCCAGGTCCTCA
                                                                                                                          GAGGGCAGCTTGACCTCTCCAGCGAGCCATGGCCACACATCTCGCCGGGAGCCAAGGATC
                                                                                                                                                 GAGCTGATCCCAACTTTGATGATTCACCGTGGCCTACAGTATCAGCTGAAGCTAAGGATT 1422
                                                                                                                                                                                                                                                                                          ACAGATCATATAGTATGGAAGCAGACATTTGGAGTATAGGTGTCATAACGTACATTCTGC
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                                                                                                                                                                                                                                                                                                                                               CAGATGAAAGGCTTAATGATATTGTTGGAAGTGCATATTATGTTGCCCCAGAGGTTTTAC 1242
                                                                                                                                                                                           TCGCCGGCGTGCCTTCTGGGCAGAGAACGAGAACGGCATCTTCACCGCCATCCTGC
                                                                                                                                                                                                                         TCTGTGGCAGTCGGCCATTCTGGGCACGAACAGAATCAGGAATATTCCGATCTGTGTTGA 1362
                                                                                                                                                                                                                                                          AGAGGAAGTACGGCCCGGAGGCCGACATCTGGAGCGTCGGCGTCATGCTCTACATCTTCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGATACACAGAGGAAGATGCCAAAGCGATTGTTGTACAGATTTTGAGCGTAGTAGCCT 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCTCGTCATGGAGCTGTGCGCGGGGGGGGGGGCTCTTCGACCGCATCATCGCCCGGGGCC 138
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53.9%;
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pollen-specific calcium dependent protein kinase gene as
disclosed in Figure 30."
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Pred. No. 6.7e-25;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 335;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: S-18805/P1/CGC1577/CIP/DIV6
REFERENCE/DOCKET NUMBER: S-18805/
                                                                                                                                                                                                               1003
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       196
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             883 TATCAGGGCACAATAATCTCGTCAAATTCTATGATGCATGTGAGGATGGCCTCAATGTCT 942
                                                                                                                                                                                                                                                                                                                                                                                                                                  19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 1349 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6121014artis Agribusiness Biotechnology Research,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                 TCTGTCATCTTCAGGGGGTAGTGCATCGTGATTTGAAGCCAGAGAATTTCCTTTTCACAA 1122
CCTGCCACTCCATGGGGGTGATGCACCGGGACATCAAGCCCCGAGAACTTCCTGCTGCTCA 255
                                                                                                                                                                                                       GGAGATACACAGAGGAAGATGCCAAAGCGATTGTTGTACAGATTTTGAGCGTAGTAGCCT 1062
                                                                                                                                                                                                                                                                                                                          ACATTGTCATGGAATTATGTGAGGGAGGAGAATTGCTAGACAGAATATTAGCCAGAGGCG 1002
                                                                                                                                        AG---TACACGGAGCGCGCGCGCGGGAGCTGCTGCGCGCCATCGTGCAGATCGTGCACA 195
                                                                                                                                                                                                                                                                                 ACCTCGTCATGGAGCTGTGCGCGGGGGGGGGGCTCTTCGACCGCATCATCGCCCCGGGGCC 138
                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCCGGCCAGCCCAACGTGGTGGGCCTCCGCGGCGCGTACGAGGAACAAGCAGAGCGTGC 78
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FILING DATE: 25-SEP-1992
APPLICATION NUMBER: US 07/772,027
FILING DATE: 04-OCT-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 02-Jun-1995
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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RETHOD FOR PRODUCING A PLANT-OPTIMIZED NUCLEIC ACID CODING SEQUENCE
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US-09-547-422-20
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                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timoth
REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 94

CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6320100artis Agribusiness Biotechnology Research,
STREET: 3054 Commallis Road
                                                                                                                                                                                                                                                                                                                                                                ZIP: 27709
COMPUTER READABLE FORM:
                                                                                                                                                                               PRIOR APPLICATION DATA:
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                                                    APPLICATION NUMBER: US 08/459,595
ETILING DATE: 02-7UN-1995
APPLICATION NUMBER: US 07/951,715
ETILING DATE: 25-8EP-1992
APPLICATION NUMBER: US 07/772,027
ETILING DATE: 04-0CT-1991
                                                                                                                                                                                                APPLICATION NUMBER: US/09/547,422
FILING DATE: 11-Apr-2000
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: NC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Research Triangle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED INSECTICIDAL ACTIVITY IN MAIZE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Warren, Gregory W. Evola, Stephen V. Crossland, Lyle D. Wright, Martha S. Merlin, Ellis J. Launis, Karen L.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lewis, Kelly S.
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                                                                                                                                                                                                                                                                                  Version
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Inc.

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RESULT 12
US-09-347-801-5
; Sequence 5, Application US/09347801
; Patent No. 6262345
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Matches
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                                                                                                                                                                          1483
                                                                                                                                                                                                                                                                                                                                                                                             1303 TCTGTGGCAGTCGGCCATTCTGGGCACGAACAGGAATCATGTCGGATCTGTTGTTGA 1362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1243 ACAGATCATATAGTATGGAAGCAGACATTTGGAGTATAGGTGTCATAACGTACATTCTGC 1302
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                                                                                                                                                                                                                                                                                                                                                                                436
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                                                                                                                                    616
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 TCTCCGGCCAGCCCAACGTGGTGGGCCTCCGCGGCGCGTACGAGGACCAAGCAGAGCGTGC 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity es 335; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDENNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
                                                                                                                                                     CTCATCCTTGGTTGCGAGATGA 1504
                                                                                                                                                                                                                                          TTGTGAAGAGATTTCTGAACAAAGATTACCGCAAAAGAATGACCGCTGTTCAAGCACTGA 1482
                                                                                                                                                                                                                                                                                  GAGGGCAGCTTGACCTCTCCAGCGAGCCATGGCCACACATCTCGCCGGGAGCCAAGGATC 555
                                                                                                                                                                                                                                                                                                              GAGCTGATCCCAACTTTGATGATTCACCGTGGCCTACAGTATCAGCTGAAGCTGAAGGATT 1422
                                                                                                                               ATCACCCATGGATCAAAGAAGA 637
                                                                                                                                                                                                   TCGTCAAGAAGATGCTCAACATCAACCCCAAGGAGCGGCTCACGGCGTTCCAGGTCCTCA 615
                                                                                                                                                                                                                                                                                                                                                                 TCGCCGGCGTGCCTCCCTTCTGGGCAGAGAACGAGAACGGCATCTTCACCGGCCATCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAAGGACGACGCCCCCCCCAAGGCCACCGACTTCGGCCTCTCCGTCTTCTTCAAGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTGTCATCTTCAGGGGGTAGTGCATCGTGATTTGAAGCCAGAGAATTTCCTTTTCACAA 1122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAGATACACAGAGGAAGATGCCAAAGCGATTGTTGTACAGATTTTGAGCGTAGTAGCCT 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION
TELEPHONE: (919)541-8587
TELEFAX: (919)541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGGAAGTACGGCCCGGAGGCCGACATCTGGAGCGTCGGCGTCATGCTCTACATCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGGCGAGCTGCTCAGGGACATCGTCGGCAGCGCCTACTACATCGCGCCCGAGGTGCTCA 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 1349 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AG---TACACGGAGCGCGCGCGCGGGGGCTGCTGCGCGCCATCGTGCAGATCGTGCACA 195
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pollen-specific calcium dependent protein kinase gene
disclosed in Figure 30."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 4; Length 1349;
e-25;
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APPLICANT: Lee, Jian Ming
TITLE OF INVENTION: Plant Protein Kinases
FILE REFERENCE: BB-1171
CURRENT APPLICATION NUMBER: US/09/347,801
CURRENT FILING DATE: 1999-07-02
EARLIER APPLICATION NUMBER: 60/092,438
EARLIER FILING DATE: July 10, 1998
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Microsoft Office 97
                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                           Query Match
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LENGTH: 568
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                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: unsure LOCATION: (568)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: unsure LOCATION: (563)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: unsure LOCATION: (557)
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ORGANISM: Glycine
FEATURE:
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765 GTCAAGAAGGGCGAGTACAAGGGACAGACCGTCGCCGTCAAGATCATCGCCAAAGCTAAG
                                         250 CATTATGAGCTCAGTGACGAAGNGGGCCGGGGGCCATTTTGGGTATACCTGCTCCGCTAAA
                                                             705 AAGTACGAGCTCGGGAAGGAGGTGGGGGAGGGGGCCACTTCGGACACACTTGCTCGGCCGTC
                                                                                                                                                                                                   585
                                                                                                                                                                                                                               115
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                                                                                                                                                                                                                                                                                              465 CCGTCGCCGGCGAGGTCGACGCCCAGGAGGTTCTTCAAGCGGCCGTTCCGCCGCCGCCGTCG
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                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                          CCCTAGCAGCGTCANTCAACACCCTTGCNGATCTTCAAGCNCCCCTTCCCTCCGCCCCTCT 114
                                                                                                    ----- NAGTGTGAGCTCGGCCTCGACAAGAGCTTTGGCTTTGCTAAGCAGTTTTCGGCT
                                                                                                                     GGGGCGGAGACGGGGCCATTGGACAAGACGTTCGGGGTTCTCGAAGAACTTCGGCGCG
                                                                                                                                                                                                                      CCGGCCAAGCACATTCGCGCGCTGCTCGCCCGCNGCCACGGTTCCGTCAAGCCGAACGAA
                                                                                                                                                                                                                                          GCCTCCATACCGGAGGCCAGC-----
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329; Conservative
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(272)
                                                                                                                                                                                                                                                                                                                                                          59.68;
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                                                                                                                                                                                                                                                                                                                                      Gaps
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            CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/951,715
FILING DATE: 25-SEP-1992
PRIOR APPLICATION NUMBER: US 07/772,027
FILING DATE: 04-OCT-1991
ATTORNEY/AGENT INFORMATION:
NAME: Pace, Gary M.
REGISTRATION NUMBER: 40403
REFERENCE/DOCKET NUMBER: GGC 1577/C1
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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APPLICANT:
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APPLICANT:
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                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/459,448A
FILING DATE: 02-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Suttie, Janet L.
TITLE OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED
TITLE OF INVENTION: INSECTICIDAL ACTIVITY IN MAILE
NUMBER OF SEQUENCES: 94
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: No. 5859336artis Corporation STREET: Patent & Trademark Dept., 520 White Plains STREET: Rd., POB 2005 CITY: Tarrytown STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGGGCACAATAATCTCGTCAAATTCTATGATGCAGGGATGGCCTCAATGTCTAC 944
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5859336
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Bowman, Cindy G.
Dawson, John L.
Dunder, Erik M.
                                                                                                                                                                                                                                                                                                                                                                                                               USA
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Warren, Gregory W.
Evola, Stephen V.
(919)541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pace, Gary M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Crossland, Lyle D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wright, Martha S.
Merlin, Ellis J.
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Best Local Similarity
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NAME/KEY:
                                                                                                                                                          1729 CCGCCCATGGAGGACGTGCGCGCGACCTACTCGATGGGCAAGGAGCTCGGGCGCGGGCA 1788
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NAME/KEY:
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OTHER INFORMATION:
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800 CGTCAAGATCATCGCCAAAGCTAAGATGACAACGGCAATATCCATTGAGGATGTTCGTAG
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2452..2602
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1481..2366
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3499..3713
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3305..3398
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3178..3304
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3076..3177
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2907..3075
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2805..2906
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/eyidence= EXPERIMENTAL
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Pred No. 9.2e-23;
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ZIP: 10591-9005

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6018104artis Corporation
STREET: Patent & Trademark Dept., 520 White Plains
STREET: Rd., POB 2005
CITY: Tarrytown
STATE: New York
                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                      APPLICANT: Suttle, Janet L. TITLE OF INVENTION: SYNTHET TITLE OF INVENTION: INSECTI
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                                                                                                                                                                                                                                                                                   Dawson, John L.
Dunder, Erik M.
Pace, Gary M.
                                                                                                                                                                                                                                                                                                                                                                  Warren, Gregory W. Evola, Stephen V. Crossland, Lyle D. Wright, Martha S. Merlin, Ellis J. Launis, Karen L.
                                                                                                        USA
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Lewis, Kelly S
                                                                                                                                                                                                                                                                                                                                     Bowman, Cindy G.
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                                                                                                                                                                                                                                      SYNTHETIC DNA SEQUENCE HAVING ENHANCED INSECTICIDAL ACTIVITY IN MAIZE
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APPLICATION NUMBER: US 07/772
FILING DATE: 04-OCT-1991
ATTORNEY/AGENT INFORMATION:
NAME: Pace, Gary M.
REGISTRATION NUMBER: 40403
REFERENCE/DOCKET NUMBER: CGC
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                          FEATURE:
NAME/KEY:
LOCATION:
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APPLICATION NUMBER: US/08/459,595A
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NAME/KEY: promoter LOCATION: 1..1477 IDENTIFICATION METHOD: OTHER INFORMATION: /pa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 07/951,715 FILING DATE: 25-SEP-1992
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2603..
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3714..3811
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3499..3713
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1481..2366
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3399..3498
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2805..2906
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04-OCT-1991
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Local Similarity 53.6%;
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                                                                                                                  Kramer, Vance C.
Warren, Gregory W.
Evola, Stephen V.
Crossland, Lyle D.
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Lewis, Kelly S.
             Bowman, Cindy G.
Dawson, John L.
Dunder, Erik M.
                                                                                      Merlin,
                                                                                                                                                                                                           Koziel,
                                                                                                    Wright, Martha S.
                                                         Rothstein, Steven J
                                                                          Launis,
Gary M.
                                                                        Karen L.
                                                                                     Ellis J.
                                                                                                                                                                                                           Michael G
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/evidence= EXPERIMENTAL
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FILING DATE: 04-OCT-1991
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: CGC1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919)541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: misc_feat
LOCATION: 1418..142
OTHER INFORMATION:
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NAME/KEY:
LOCATION:
FEATURE:
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NAME/KEY:
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TITLE OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED
TITLE OF INVENTION: INSECTICIDAL ACTIVITY IN MAIZE
NUMBER OF SEQUENCES: 94
CORRESPONDENCE ADDRESS:
                                                                                                                                   LOCATION:
FEATURE:
NAME/KEY:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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MOLECULE TYPE:
HYPOTHETICAL:
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PRIOR APPLICATION DATA:
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NAME/KEY:
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LOCATION:
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LOCATION: FEATURE:

3178..3304

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; NAME/KEY: exon
; LOCATION: 3399..3498
; FEATURE:
; NAME/KEY: Intron
LOCATION: 3499..3713
; FEATURE:
; NAME/KEY: exon
LOCATION: 3714..3811
US-08-459-504B-26
Search completed: January 26, 2003, 10:46:59 Job time: 97 secs
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6.0%; Score 143; DB 3; Length 4162;
Best Local Similarity 53.6%; Pred. No. 9.2e-23;
Matches 349; Conservative 0; Mismatches 290; Indels 12;
                                                       2317
                                                           1280 AGGTGTCATAACGTACATTCTGCTCTGTGGGAGTCGGCCATTCTGGGCACG 1330
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LOCATION:
FEATURE:
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Result
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Maximum DB :
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Maximum Mdtch 100%
Listing first 45 summaries
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Perfect score:
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       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: /cgn2_6/ptodata/1,

2: /cgn2_6/ptodata/1,

3: /cgn2_6/ptodata/1,

4: /cgn2_6/ptodata/1,

5: /cgn2_6/ptodata/1,

6: /cgn2_6/ptodata/1,
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/Packfiles1.pep:*
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US-08-459-504B-25
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APPLICANT: Allen, Steve
APPLICANT: Lee, Jian Ming
TITLE OF INVENTION: Plant Protein Kinases
FILE REFERENCE: BB-1171
CURRENT APPLICATION NUMBER: US/09/347,801
CURRENT FILING DATE: 1999-07-02
EARLIER APPLICATION NUMBER: 60/092,438
EARLIER FILING DATE: July 10, 1998
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Microsoft Office 97
SEQ ID NO 18
LENGTH: 625
TYPE: PRT
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US-09-347-801-18
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Best Local S
Matches 561
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APPLICANT: LAG. Jian Ming
TITLE OF INVENTION: Plant Protein Kinases
FILE REFERENCE: BB-1171
CURRENT APPLICATION NUMBER: US/09/347,801
CURRENT FILING DATE: 199-07-02
EARLIER APPLICATION NUMBER: 60/092,438
EARLIER FILING DATE: July 10, 1998
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Microsoft Office 97
SEQ ID NO 19
LENGTH: 576
TYPE: PRT
ORGANISM: Arabidopsis thaliana
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US-09-347-801-19
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Best Local Similarity
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NKDYRKRLTAAQALCHPWLVGSHELKIPSDMIIYKLVKVYIMSTSLRKSALAALAKTLTV
              NKDYRKRMTAVQALTHPWL-RDEQRQIPLDILIFRLIKQYLRATPLKRLALKALSKALRE
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                                                     EADMWSIGVIAYILLCGSRPFWARTESGIFRAVLKAEPNFEEAPWPSLSPEAVDFVKRLL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/347,801
CURRENT FILING DATE: 1999-07-02
EARLIER APPLICATION NUMBER: 60/092,438
EARLIER FILING DATE: July 10, 1998
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Microsoft Office 97
SEQ ID NO 17
LENGTH: 639
TYPE: DET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Allen, Steve
APPLICANT: Lee, Jian Ming
TITLE OF INVENTION: Plant Protein Kinases
FILE REFERENCE: BB-1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FWARTESGIFRSVLRADPNFDDSPWPTVSAEAKDFVKRFLNKDYRKRMTAVQALTHPWLR 435
                                                                                                                                                                                           ALKTIDFGLSIFFRPGQIFTDVVGSPYYVAPEVLKKRYGPEADVWSAGVIIYILLCGVPP
                                                                                                                                                                                                                PMKLIDFGLSDFIRPDERLNDIVGSAYYVAPEVLHRSYSMEADIWSIGVITYILLCGSRP
                                                                                                                                                                                                                                                                                    CEGGELLDRILARGGRYTEEDAKAIVVQILSVVAFCHLQGVVHRDLKPENFLFTTRDENA 315
                                                                                                                                                                                                                                                                                                                                    -TGKELACKSILKRKLGSDDDVEDVRREIQIMHHLAGHPSVVGIRGAYEDAVAVHLVMEL 233
                                                                                                                                                                                                                                                                                                                                                                                                          RVSSAGLILGSVLRRKTE------NLKDKYSLGRRLGQGQFGTTHLC---VERA- 174
                                                                                                                                                                                                                                                                                                                                                                                                                            GVGAGGGGGAADGAETERPLDKTFGFSKNFGAKYELGKEVGRGHFG--HTCSAVVKKGE 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LPAGVSPSPARSTPRRFFKRPFPPPSPAKHIK-ATLAKRLGGG-----KPKEGTIPEEG 137
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              -PRDGFVSLDNFRTALTRYLTDAMKESRVLEFLHALEPLAYRRMDFEEFCAAAISPYQLE 547
                                                                                    DEQRQI-----PLDILIFRLIKQYLRATPLKRLALKALSKALREDELLYLKLQFKLLE 488
                                                                                                                                                                                                                                                                CGGGELFDRIVRR-GHYTERKAAELARVIVGVVEACHSMGVMHRDLKPENFLFADHSEEA
                                                                                                                                                                                                                                                                                                                                                                       YKGQTVAVKITAKAKMTTAISIEDVRREVKILRALSGHNNLVKFYDACEDGLNVYIVMEL 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EEFCAAAISPYQLEALERWEEIAGTAFQQFEQEGNRVISVEELAQELNLAPT--HYSIVQ 591
                                                   ----QVGGVAPDRPLDSAVLSRMKQFSAMNKLKKMALRVIAENLSEDEIAGLREMFKMID
                                                                                                                       FWAENEQGIFEEVLHGRLDFESEPWPSISDGAKDLVRRMLVRDPRKRLTAHEVLRHPWV- 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EPVKIAAYHSEPAPAVRSEAPEPVKIAASHSEPAPMAAKPGGAAANASPSPSPRPRPQVK 129
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EEFCASALSVYQLEAMETWEQHARRAYELFEKDGNRPIMIEELASELGLGPSVPVHVVLQ
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APPLICATION: 800
PRIOR APPLICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/772,027
FILING DATE: 04-0CT-1991
ATTORNEY/AGENT INFORMATION:
NAME: Spruill, W. Murray
REGISTRATION NUMBER: 32,943
REFERENCE/DOCKET NUMBER: S-18805/P
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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GENERAL INFORMATION:
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                                                                                                                                                                   TELEFAX: (919)541-868 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Suttie, Janet L.
TITLE OF INVENTION: INSECTICIDAL ACTIVITY IN MAIZE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                     SEQUENCE CHARACTERISTICS:
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                                               FEATURE:
                                                            MOLECULE TYPE: protein HYPOTHETICAL: NO
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               NAME/KEY:
                                                                                                     TYPE: amino a STRANDEDNESS:
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CITY: Hawthorne
STATE: New York
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 OTHER INFORMATION:
                                                                                                                                     LENGTH:
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                                                                                                                     amino acid
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                                                                                                                                  464 amino acids
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Dunder, Erik M.
Pace, Gary M.
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Evola, Stephen V.
Crossland, Lyle D.
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Bowman, Cindy G.
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               Protein
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, Kelly S.
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Karen L.
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/note= "derived protein sequence
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; OTHER INFORMATION: US-07-951-715A-22
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Patent No.
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Best Local Similarity
                                                                                                                                                      APPLICANT: Pace, Gary M.
APPLICANT: Suttle, Janet L.
TITLE OF INVENTION: SYNTHETIC DNA :
TITLE OF INVENTION: INSECTICIDAL AC
NUMBER OF SEQUENCES: 94
CORRESPONDENCE ADDRESS:
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APPLICANT:
APPLICANT:
APPLICANT:
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APPLICANT:
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COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       52
                                                                          ADDRESSEE: No. 5859336artis Corporation STREET: Patent & Trademark Dept., 520 White Plains STREET: Rd., POB 2005 CITY: Tarrytown
                                      COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EEDAKAIVVQILSVVAFCHLQGVVHRDLKPENFLFTTRDENAPMKLIDFGLSDFIRPDER 333
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                     10591-9005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , Application US/08459448A
5859336
                                                         New York
                                                                                                                                                                                                                                                                                    Rothstein, Steven J.
Rothstein, Steven J.
Bowman, Cindy G.
Dawson, John L.
Dunder, Erik M.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Kramer, Vance C. Warren, Gregory W. Evola, Stephen V. Crossland, Lyle D.
                                                                                                                                                                                                                                                                                                                                                                                          Wright, Martha S. Merlin, Ellis J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Desai,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lewis, Kelly S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Koziel,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nalini M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Michael G.
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                                                                                                                                                                                                       SYNTHETIC DNA SEQUENCE HAVING ENHANCED INSECTICIDAL ACTIVITY IN MAIZE
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (919)541-8689 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,448A
ETITING NUMBER: US/08/459,448A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: PACE, GAIY M.
REGISTRATION NUMBER: 40403
REFERENCE/DOCKET NUMBER: CGC 1577/CIP/DIV4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919)541-8582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 464 amino acid
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PRIOR APPLICATION DATA:
APPLICATION UMBER: US 07/772,027
FILING DATE: 04-OCT-1991
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APPLICATION NUMBER: US 07/951,715
FILING DATE: 25-SEP-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION: NAME: Pace, Gary M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Protein
LOCATION: 1.464
OTHER INFORMATION:
OTHER INFORMATION:
                                          406
                                                                                                                                                               511 MKESRVLEFLHALEPLAYRRMDFEEFCAAAISPYQLEALERWEEIAGTAFQQFEQEGNRV 570
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           156 RPLDKTFGFSKNFGAKYELGKEVGRGHFG--HTCSAVVKKGEYKGQTVAVKIIAKAKMTT 213
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                                                                                                                                                                                                                                                                                                                NFDDSPWPTVSAEAKDFVKRFLNKDYRKRWTAVQALTHPWLRD--EQRQIPLDILIFRLI 451
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EEDAKAIVVQILSVVAFCHLQGVVHRDLKPENFLFTTRDENAPMKLIDFGLSDFIRPDER 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RPME-----DVRATYSMGKELGRGQFGVTHLCT----HRTSGEKLACKTIAKRKLAA 51
                                        ITKEELEHALKEQGLYDADKIKDIISDADSDNDGRIDYSEFVAMM 450
                                                                                ISVEEL-----AQELNLAPTHYSIVQDWIRKSDGKLNELGETKEL
                                                                                                                           LSDSEMEKLMEAADADGNGLIDYDEFVTATV - - - HMNKLDR - EEHLYTAFQYFDKDNSGY
                                                                                                                                                                                                         KQFRAMNQFKKAALRIIAGCLSEEEITGLKEMFKNIDKDNSGTITLDELKHGLAKH-GPK
                                                                                                                                                                                                                                                KQYLRATPLKRLALKALSKALREDELLYLKLQFKLLE-PRDGFVSLDNFRTALTRYLTDA
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pollen specific CDPK as disclosed in Figure
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; NAME/KEY: Protein 1.464 ; CICATION: 1.464 ; OTHER INFORMATION: 7.07+ER INFORMATION: 1.08-08-459-595A-22
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Patent No.
   Matches
                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 07/772,027
FILING DATE: 04-OCT-1991
ATTORNEY,AGENT INFORMATION:
NAME: Pace, Gary M.
REGISTRATION NUMBER: 40403
REFERENCE/DOCKET NUMBER: CGC 1577/C
TELECOMMUNICATION INFORMATION:
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APPLICANT: Dawson, John L.
APPLICANT: Dunder, Erik M.
APPLICANT: Pace, Gary M.
APPLICANT: Statie, Janet L.
TITLE OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED.
NUMBER OF SEQUENCES: 94
CORRESPONDENCES: 94
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NFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER: US 07/951,715
FILING DATE: 25-SEP-1992
PRIOR APPLICATION DATA:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,595A
FILING DATE: 03-JUN-1995
CLASSIFICATION: 800
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6018104artis Corporation
STREET: Patent & Trademark Dept., 520 W
STREET: Rd., POB 2005
CITY: Tarrytown
STATE: New York
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Launis, Karen L.
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Stephen V.
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                 26.2%;
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                                                                               /note= "derived protein sequence of
pollen specific CDPK as disclosed in Figure
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               Score 854; DB 3
Pred. No. 1e-60;
Mismatches
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                               DB 3; Length 464;
   163;
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RESULT 8
US-08-459-504B-22
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/459,504)
FILING DATE:
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                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
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                                                                                                                                                                                         STREET: 3054 Cornwallis Road CITY: Research Triangle Park
                                                                                                                                                                                                                               ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NFDDSPWPTVSAEAKDFVKRFLNKDYRKRMTAVQALTHPWLRD--EQRQIPLDILIFRLI 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LNDIVGSAYYVAPEVLHRSYSMEADIWSIGVITYILLCGSRPFWARTESGIFRSVLRADP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ITKEELEHALKEQGLYDADKIKDIISDADSDNDGRIDYSEFVAMM 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ISVEEL-----AQELNLAPTHYSIVQDWIRKSDGKLNFLGFTKFL 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LSDSEMEKLMEAADADGNGLIDYDEFVTATV---HMNKLDR-EEHLYTAFQYFDKDNSGY 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MKESRVLEFLHALEPLAYRRMDFEEFCAAAISPYQLEALERWEEIAGTAFQQFEQEGNRV 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ERGAAELLRAIVQIVHTCHSMGVMHRDIKPENFLLLSKDEDAPLKATDFGLSVFFKEGEL 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REDVDDVRREVQIMHHLSGQPNVVGLRGAYEDKQSVHLVMELCAGGELFDRIIAR-GQYT 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KQFRAMNQFKKAALRIIAGCLSEEEITGLKEMFKNIDKDNSGTITLDELKHGLAKH-GPK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DLSSEPWPHISPGAKDLVKKMLNINPKERLTAFQVLNHPWIKEDGDAPDTPLDNVVLDRL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LRDIVGSAYYIAPEVLKRKYGPEADIWSVGVMLYIFLAGVPPFWAENENGIFTAILRGQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EEDAKAIVVQILSVVAFCHLQGVVHRDLKPENFLFTTRDENAPMKLIDFGLSDFIRPDER 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RPME-----DVRATYSMGKELGRGQFGVTHLCT-----HRTSGEKLACKTIAKRKLAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22,
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                                                                                                                                                                         NC
                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                              Pace, Gary M.
Suttie, Janet L.
                                                                                                                                                                                                                                                                                                                                                  Dawson, John L.
Dunder, Erik M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Warren, Gregory W.
Evola, Stephen V.
Crossland, Lyle D.
                                                                                                                                                                                                                                                                                                                                                                               Bowman, Cindy G.
                                                                                                                                                                                                                                                                                                                                                                                                   Rothstein, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                Merlin, Ellis J.
Launis, Karen L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wright, Martha S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Warren,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Desai,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kramer, Vance C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lewis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Koziel,
                                                                                                                                                                                                                           No. 6075185artis Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kelly S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nalini M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Michael G
                                                    Release #1.0,
                   US/08/459,504B
                                                      Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51
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PRIOR APPLICATION DATA:

APPLICATION NUMBER: FILING DATE: 02-JUN APPLICATION NUMBER:

02-JUN-1995 UMBER: US 07/951,715

US 08/459,595

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NAME/KEY: Protein
LOCATION: 1..464
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                US-08-459-444-22
Sequence O, Application US/08459444A
Patent No. 6121014
GENERAL INFORMATION:
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Best Local Similarity 40.0
Matches 186; Conservative
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APPLICATION NUMBER: US 07/772,027

APPLICATION NUMBER: US 07/772,027

FILING DATE: 04-0CT-1991

ATTORNEY/AGENT INFORMATION:

NAME: Medgs, J. Timothy

REGISTRATION NUMBER: 38,241

REFERENCE/DOCKET NUMBER: CGC1577/CI

TELECOMMUNICATION INFORMATION:

TELEFAX: (919)541-8587

TELEFAX: (919)541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HYPOTHETICAL:
                                                                                                                                                               406
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          214
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: sin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENGTH:
APPLICANT: Koziel, Michael G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EEDAKAIVVQILSVVAFCHLQGVVHRDLKPENFLFTTRDENAPMKLIDFGLSDFIRDDER 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AISIEDVRREVKILRALSGHNNLVKFYDACEDGLNVYIVMELCEGGELLDRILARGGRYT 273
                                                                                                                                                             ITKEELEHALKEQGLYDADKIKDIISDADSDNDGRIDYSEFVAMM 450
                                                                                                                                                                                                                                            LSDSEMEKLMEAADADGNGLIDYDEFVTATV---HMNKLDR-EEHLYTAFQYFDKDNSGY 405
                                                                                                                                                                                                                                                                                                                                                                                                                          NFDDSPWPTVSAEAKDEVKRELNKDYRKRMTAVQALTHPWLRD--EQRQIPLDILIFRLI 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REDVDDVRREVQIMHHLSGQPNVVGLRGAYEDKQSVHLVMELCAGGELFDRIIAR-GQYT 110
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                                                                                                                                                                                                  ISVEEL-----AQELNLAPTHYSIVQDWIRKSDGKLNFLGFTKFL 610
                                                                                                                                                                                                                                                                                MKESRVLEFLHALEPLAYRRMDFEEFCAAAISPYQLEALERWEEIAGTAFQQFEQEGNRV 570
                                                                                                                                                                                                                                                                                                                        KQFRAMNQFKKAALRIIAGCLSEEEITGLKEMFKNIDKDNSGTITLDELKHGLAKH-GPK 349
                                                                                                                                                                                                                                                                                                                                                              KQYLRATPLKRLALKALSKALREDELLYLKLQFKLLE-PRDGFVSLDNFRTALTRYLTDA 510
                                                                                                                                                                                                                                                                                                                                                                                                     DLSSEPWPHISPGAKDLVKKMLNINPKERLTAFQVLNHPWIKEDGDAPDTPLDNVVLDRL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ERGAAELLRAIVQIVHTCHSMGVMHRDIKPENFLLLSKDEDAPLKATDFGLSVFFKEGEL 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 464 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "derived protein sequence of
pollen specific CDPK as disclosed in Figure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 854; DB 3; Length 464; Pred. No. 1e-60; Mismatches 163; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28;
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; LOCATION: 1.464; SEQUENCE DESCRIPTION: SEQ ID NO: 22: US-08-459-444-22
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Best Local Similarity
Matches 186; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
334 LNDIVGSAYYVAPEVLHRSYSMEADIWSIGVITYILLCGSRPFWARTESGIFRSVLRADP
                                                                 111
                                                                                                                                                                            214 AISIEDVRREVKILRALSGHNNLVKFYDACEDGLNVYIVMELCEGGELLDRILARGGRYT 273
                                                                                                                                                                                                                                                               156 RPLDKTFGFSKNFGAKYELGKEVGRGHFG--HTCSAVVKKGEYKGQTVAVKIIAKAKMTT
                                                                                                                                                                                                                                     4 RPME-----DVRATYSMGKELGRGQFGVTHLCT----HRTSGEKLACKTIAKRKLAA 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 464 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: S-18805/P1/CGC1577/CIP/DIV6
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919)541-8587
TELEFAX: (919)541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/951,715
FILING DATE: 25-SEP-1992
APPLICATION NUMBER: US 07/772,027
FILING DATE: 04-OCT-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6121014artis Agribusiness Biotechnology Research,
STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Crossland, Lyle D.
Wright, Martha S.
Merlin, Ellis J.
Launis, Karen L.
TITLE OF INVENTION: METHOD FOR PRODUCING A PLANT-OPTIMIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                 ERGAAELLRAIVQIVHTCHSMGVMHRDIKPENFLLLSKDEDAPLKATDFGLSVFFKEGEL
                                                                                                                                                  REDVDDVRREVQIMHHLSGQPNVVGLRGAYEDKQSVHLVMELCAGGELFDRIIAR-GQYT 110
                                                                                                      EEDAKAIVVQILSVVAFCHLQGVVHRDLKPENFLFTTRDENAPMKLIDFGLSDFIRPDER 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: Protein LOCATION: 1..464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/459,444A FILING DATE: 02-Jun-1995 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                   26.2%;
ilarity 40.0%;
Conservative 88
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Lewis, Kelly S.
Kramer, Vance C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUCLEIC ACID CODING SEQUENCE
                                                                                                                                                                                                                                                                                                                     , 88
                                                                                                                                                                                                                                                                                                                 Score 854; DB 3; 1
Pred. No. le-60;
8; Mismatches 163;
                                                                                                                                                                                                                                                                                                                                                          DB 3; Length 464;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein sequence of CDPK as disclosed in
                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                     28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Figure
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US-09-547-422-22
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                                                                                                INFORMATION FOR
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                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: (919)541-8587
TELEFAX: (919)541-8689
TELEFAX: (1919)541-8689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6320100artis Agribusiness
STREET: 3054 Cornwallis Road
                                  SEQUENCE CHARACTERISTICS:
LENGTH: 464 amino acids
                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NFDDSPWPTVSAEAKDFVKRFLNKDYRKRMTAVQALTHPWLRD--EQRQIPLDILIFRLI 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ISVEEL-----AQELNLAPTHYSIVQDWIRKSDGKLNFLGFTKFL 610
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DLSSEPWPHISPGAKDLVKKMLNINPKERLTAFQVLNHPWIKEDGDAPDTPLDNVVLDRL 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LRDIVGSAYYIAPEVLKRKYGPEADIWSVGVMLYIFLAGVPPFWAENENGIFTAILRGQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LSDSEMEKLMEAADADGNGLIDYDEFVTATV---HMNKLDR-EEHLYTAFQYFDKDNSGY 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KQFRAMNQFKKAALRIIAGCLSEEEITGLKEMFKNIDKDNSGTITLDELKHGLAKH-GPK 349
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                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/09/547,422 FILING DATE: 11-Apr-2000 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                    NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: S-18805H
                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/459,595
FILING DATE: 02-JUN-1995
APPLICATION NUMBER: US 07/951,715
FILING DATE: 25-SEP-1992
APPLICATION NUMBER: US 07/772,027
FILING DATE: 04-OCT-1991
TYPE: amino acid
STRANDEDNESS: single
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OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED INSECTICIDAL ACTIVITY IN MAIZE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27709
                                                                                                SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Koziel, Michael G
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Evola, Stephen V.
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Lewis, Kelly S.
Kramer, Vance C.
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                                                                          /note= "derived
pollen specific
                                                                        protein sequence of CDPK as disclosed in Figure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 25, App.
                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No. 5625136
GENERAL INFORMATION:
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Best Local Similarity
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APPLICANT:
APPLICANT:
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                                                        APPLICANT: Dunder, Erik M.
APPLICANT: Pace, Gary M.
APPLICANT: Suttie, Janet L.
TITLE OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED
TITLE OF INVENTION: INSECTICIDAL ACTIVITY IN MAIZE
                                                                                                                                                  APPLICANT:
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                                    CORRESPONDENCE ADDRESS:
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                                                      NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   156 RPLDKTFGFSKNFGAKYELGKEVGRGHFG--HTCSAVVKKGEYKGQTVAVKIIAKAKMTT 213
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                ADDRESSEE:
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HYPOTHETICAL: N
FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RPME-----DVRATYSMGKELGRGQFGVTHLCT----HRTSGEKLACKTIAKRKLAA 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DLSSEPWPHISPGAKDLVKKMLNINPKERLTAFQVLNHPWIKEDGDAPDTPLDNVVLDRL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ERGAAELLRAIVQIVHTCHSMGVMHRDIKPENFLLLSKDEDAPLKATDFGLSVFFKEGEL 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EEDAKAIVVQILSVVAFCHLQGVVHRDLKPENFLFTTRDENAPMKLIDFGLSDFIRPDER 333
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LSDSEMEKLMEAADADGNGLIDYDEFVTATV---HMNKLDR-EEHLYTAFQYFDKDNSGY 405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/07951715A
                                                                                                                                              Merlin, Ellis J.
Launis, Karen L.
Rothstein, Steven J.
Bowman, Cindy G.
Dawson, John L.
Dunder, Erik M.
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Lewis, Kelly S.
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              CIBA-GEIGY Corporation
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Pred. No. 1
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Best Local Similarity
Matches 178; Conserv
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ETILING DATE: 04-OCT-1991
ATTORNEY/AGENT INFORMATION:
NAME: Spruill, W. Murray
REGISTRATION NUMBER: 32,943
REFERENCE/DOCKET NUMBER: S-18805/A/
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (919)541-8615
TELEFAX: (919)541-8689
INFORMATION FOR SEQ ID NO: 25
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30B
CURRENT APPLICATION DATA:
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LENGTH: | 463 amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
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                                                                                                                                                                                                                   461 KRLALKALSKALREDELLYLKLOFKLLE-PRDGFVSLDNFRTALTRYLTDAMKESRVLEF 519
                                                                                                                                                                                                                                                                                                          403 VSAEAKDFVKRFLNKDYRKRMTAVQALTHPWLRDEQ--RQIPLDILIFRLIKQYLRATPL 460
                                                                                                                                                                                                                                                                                                                                                                            343 YVAPEVLHRSYSMEADIWEIGVITYILLCGSRPFWARTESGIFRSVLRADPNFDDSPWPT 402
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          165 SKNFGAKYELGKEVGRGHFGHT--CSAVVKKGEYKGQTVAVKIIAKAKMTTAISIEDVRR 222
                                           579 -- ELNLAPTHYSIVQDWIRK---- SDGKLNFLGFTKFL 610
                                                                                                                             520 LHALEPLAYRRMDFEEFCAAAISPYQLEALERWEEIAGTAFQQFEQEGNRVISVEELAQ- 578
                                                                                                                                                                          300 KKMALRVIAERLSEEEIGGLKELFKMIDTDNSGTITFDELKDGLKRVGSELM-ESEIKDL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  283 QILSVVAFCHLQGVVHRDLKPENFLFTTRDENAPMKLIDFGLSDFIRPDERLNDIVGSAY 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      223 EVKILRALSGHNNLVKFYDACEDGLNVYIVMELCEGGELLDRILARGGRYTEEDAKAIVV 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 1..463
OTHER INFORMATION:
OTHER INFORMATION:
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STRANDED
TOPOLOGY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6 TQNIREVYEVGRKLGQGQFGTTFECTRRASGGKF-----ACKSIPKRKLLCKEDYEDVWR 60
CKDFGLDDIH---IDDMIKEIDQDNDGQIDYGEFAAMM 449
                                                                                      MDAADIDKSGTIDYGEFIAATV---HLNKLEREENLV-SAFSYFDKDGSGYITLDEIQQA 414
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mino acid
NESS: single
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soybean CDPK as shown in Figure 34."
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RESULT 12
US-08-459-448A-25
US-08-459-448A-25
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GENERAL INFORMATION:
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Patent No. 5859336
                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,448A
FILING DATE: 02-JUN-1995
CLASSIFICATION: 800
PRIOR APPLICATION UMBER: US 07/951,715
APPLICATION NUMBER: US 07/951,715
FILING DATE: 25-SEP-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/772,027
FILING DATE: US 07/772,027
FILING DATE: US 07-772,027
FILING DATE: US 07-772,027
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MEDIUM TYPE: Floppy disk
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ADDRESSEE: No. 5859336artis Corporation
STREET: Patent & Trademark Dept., 520 White Plains
                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                        TELEPHONE: (919)541-8582
                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Pace, Gary M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED TITLE OF INVENTION: INSECTICIDAL ACTIVITY IN MAIZE
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                                                                                 HYPOTHETICAL: NO FEATURE:
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            LOCATION: 1.463
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                      LENGTH:
TYPE: a
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STREET: Rd., POB 2005
CITY: Tarrytown
STATE: New York
                                                                                                                                                  STRANDEDNESS:
                                                                                                                                                                                                                                                                                                             NAME: Pace, Gary M. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                               NAME/KEY: Protein
                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER:
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                                                                                                                                                                      amino acid
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Bowman, Cindy G.
Dawson, John L.
Dunder, Erlk M.
Pace, Gary M.
                                                                                                                                                                                       463 amino acids
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Evola, Stephen V.
Crossland, Lyle D.
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Launis, Karen L.
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linear
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          /note= "protein sequence
soybean CDPK as shown in
                                                                                                                                                                                                                                                                                                                40403
                                                                                                                                                                                                                                                                                              CGC 1577/CIP/DIV4
   e for
h Figure 34."
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Query Match Best Local Similarity

25.1%; 38.9%;

Score 817; DB 2; Pred. No. 9.8e-58;

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US-08-459-595A-25
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APPLICANT: Suttie, Janet L.
TITLE OF INVENTION: SYNTHETIC
TITLE OF INVENTION: INSECTIC:
NUMBER OF SEQUENCES: 94
CORRESPONDENCE ADDRESS:
                COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
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                                                                                                                                               ADDRESSEE: No. 6018104artis Corporation
STREET: Patent & Trademark Dept., 520 White Plains
STREET: Rd., POB 2005
CITY: Tarrytown
STATE: New York
 SOFTWARE: Patentin N
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                                                                                                                  10591-9005
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Warren, Gregory W.
Evola, Stephen V.
Crossland, Lyle D.
                                                                                                                                    USA
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Dawson, John L.
Dunder, Erik M.
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Merlin, Ellis J.
Launis, Karen L.
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RESULT 14
US-08-459-504B-25
; Sequence 25, Application US/08459504B
; Patent No. 6075185
; GENERAL INFORMATION:
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Pace, Gary M.
REGISTION NUMBER: 40403
REFERENCE/DOCKET NUMBER: CG
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: UFILING DATE: 25-SEP-1 PRIOR APPLICATION DATA: APPLICATION NUMBER: U
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ATTORNEY/AGENT INFORMATION:
NAME: Pace, Gary M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
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STRANDEDNESS: sin
TOPOLOGY: linear
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25-SEP-1992
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soybean CDPK as shown in
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Figure
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                                                              Matches 178;
                                                                                            Query Match
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PRIOR APPLICATION DATA:
APPLICATION UMBER: US 07/772,027
FILING DATE: 04-OCT-1991
ATTORNEY/AGENT INFORMATION:
NAME: Me19s, J. Timothy
REGISTRATION NUMBER: 38,241
                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 02-JUN-19
APPLICATION NUMBER: US
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APPLICANT: Suttle, Janet L.
TITLE OF INVENTION: SXYMHETIC DNA SEQUENCE HAVING ENHANCED
TITLE OF INVENTION: INSECTICIDAL ACTIVITY IN MAIZE
NUMBER OF SEQUENCES: 94
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6075185artis Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
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APPLICANT:
APPLICANT:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
                                                                                                                                                                                                                                                                                                                                                               REGISTRATIÓN NUMBER: 38 241
REFERENCE/DOCKET NUMBER: CG
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919)541-8587
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                                                                                                                                                                                                                       HYPOTHETICAL:
                                                                                                                                                                                                                                      TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
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                                                                                                                                          NAME/KEY: Protein LOCATION: 1.463 OTHER INFORMATION: OTHER INFORMATION:
                               165 SKNEGAKYELGKEVGRGHEGHT--CSAVVKKGEYKGQTVAVKTIAKAKMTTAISIEDVRR 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
CITY: Re
STATE: N
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                              Local
                                                                                                                                                                                                                                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                    TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
σ
                                                                                                                                                                                                                                                                                                    LENGTH: 463 amino acids
TQNIREVYEVGRKLGQGQFGTTFECTRRASGGKF-----ACKSIPKRKLLCKEDYEDVWR 60
                                                              Similarity 38.
78; Conservative
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Research Triangle Park
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Evola, Stephen V.
Crossland, Lyle D.
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Dunder, Erik M.
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                                                                                                                                                                                                                                                      linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vance C.
                                                                              25.1%;
                                                                                                                                          /note= "protein sequence soybean CDPK as shown in
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US 08/459,595
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                                                                                                                                                                                                                                                                                                                                   25:
                                                              94;
                                                                                                                                                                                                                                                                                                                                                                                                CGC1577/CIP/DIV
                                                              Score 817; DB 3;
Pred. No. 9.8e-58;
4; Mismatches 16(
                                                                                                                              y for
n Figure 34."
                                                                                             Length 463;
                                                                Indels
                                                                26;
                                                              Gaps
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RESULT 15
US-08-459-444-25
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 415 CKDFGLDDIH----IDDMIKEIDQDNDGQIDYGEFAAMM 449
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           283 QILSVVAFCHLQGVVHRDLKPENFLFTTRDENAPMKLIDFGLSDFIRPDERLNDIVGSAY 342
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                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/951,715
FILING DATE: 25-SEP-1992
APPLICATION NUMBER: US 07/772,027
FILING DATE: 04-OCT-1991
ATTORNEY/ACENT INFORMATION:
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                     COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PATENTIAL RELEASE #1.0, VERSION #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,444A
FILING DATE: 02-Jun-1995
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 94
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6121014artis Agribusiness Biotechnology Research,
STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: METHOD FOR PRODUCING A PLANT-OPTIMIZED NUCLEIC ACID CODING SEQUENCE
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TELECOMMUNICATION INFORMATION:
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                NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: S-18805/P1/CGC1577/CIP/DIV6
                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 27709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: NC
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Evola, Stephen V.
Crossland, Lyle D.
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Merlin, Ellis J.
Launis, Karen L.
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Search completed: January 26, 2003, 11:51:49 Job time: 26 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (919)541-8587
TELEFAX: (919)541-8689
INFORMATION FOR SEQ ID NO: /note= "protein sequence for soybean CDPK as shown in Figure 34."
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        461
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                                                                                                                                                                                415 CKDFGLDDIH---IDDMIKEIDQDNDGQIDYGEFAAMM 449
                                                                                                                                                                                                                                                                                                                                                       359 MDAADIDKSGTIDYGEFIAATV---HLNKLEREENLV-SAFSYFDKDGSGYITLDEIQQA 414
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LOCATION: 1..463
SEQUENCE DESCRIPTION: SEQ ID NO:
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                                                                                                                                                                                                                                     LHALEPLAYRRMDFEEFCAAAISPYQLEALERWEEIAGTAFQQFEQEGNRVISVEELAQ- 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TONIREVYEVGRKLGOGOFGTTFECTRRASGGKF-----ACKSIPKRKLLCKEDYEDVWR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 463 amino acids TYPE: amino acid
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